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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,354	02/10/2006	Hiroaki Takaoku	P28768	6744
7055 7590 02/27/2008 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER NGUYEN, VINCENT Q				
ART UNIT 2858		PAPER NUMBER		
NOTIFICATION DATE 02/27/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

# Office Action Summary

**Application No.**

10/556,354

**Applicant(s)**

TAKAOKU, HIROAKI

**Examiner**

Vincent Q. Nguyen

**Art Unit**

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 1/25/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 11/30/2007.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This Office action is in response to Applicant's amendment filed 01/25/2008.

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5, 6, 8, 9, 12-17, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obie et al. (5,038,096) in view of Fromm (2,926,304).

With respect to claims 1, 5, 8, 9, 15, 19, Obie et al. discloses a signal measuring device comprising a local signal generating means (106) that generates a local signal; a mixing means (104) that mixes a signal (Pulse signal) to be measured with the local signal; a frequency sweeping means (120, 122, 124) that sweeps the frequency of the local signal; and a sweep control means that terminates the sweep upon a termination of a presence section of the signal to be measured.

The only difference between Obie et al. and the claimed invention is that the claimed invention recites the signal to be measured based on a component extracted from an output of the mixing means in place of determining by input from a user.

From discloses a system and method similar to that of Obie and further discloses the signal to be measured based on a component extracted from an output of the mixing means (12) for the purpose of stabilizing the signal to enhance the accuracy (Col. 1 lines 15-52; col. 3 lines 45-75).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the signal to be measured based on a component extracted from an output of the mixing means to terminate the sweep as taught by Fromm into the system of Obie et al. because terminate the sweep based on a component extracted from an output of the mixing means or based on the input of the user is a matter of design choice.

With respect to claims 2, 16, Obie et al. discloses said sweep control means (120, 122, 124) receives a trigger signal whose state changes upon the termination of the presence section of the signal to be measured.

With respect to claims 3, 17, Obie et al. discloses an intermediate frequency filter (108) that extracts a component within a predetermined frequency band from said mixing means (104), wherein the trigger signal is generated based upon an output from said intermediate frequency filter.

With respect to claims 6, 12-14, 20, Obie discloses widths of sections including the carrier waves differ from each other (It is inherently that the signals being tested do not have the same width or frequency, they differ from each other).

4. Claims 4, 7, 10, 11, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obie et al. (5,038,096) in view of Fromm (2,926,304) of Tomikawa (5,869,959).

With respect to claims 4, 7, 10, 11, 18, Obie et al. discloses said sweep control means comprises a delay means that delays the trigger signal (Col. 7 lines 8-21).

Obie and Fromm do not disclose a logical product output means that takes and outputs a logical product of an output from said delay means and the trigger signal, and whether the sweep is terminated or not is determined according to said logical product output means.

Tomikawa discloses a system similar to that of Obie et al. and Fromm and further discloses a logical product (23C) to logically control the signals.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the logical product instead of using microprocessor into the system of Obie of because using the  $\mu$ P (124) or using the logical product is the matter of design choice depends upon the cost constraining.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Q. Nguyen whose telephone number is (571) 272-2234. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2858

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vincent Q. Nguyen/  
Primary Examiner, Art Unit 2858

February 17, 2008